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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,303	11/13/2000	Suk Won Park	0630-1175P	3414
2292	7590	06/04/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NALEVANKO, CHRISTOPHER R	
			ART UNIT	PAPER NUMBER
			2611	5

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/709,303

Applicant(s)

PARK ET AL.

Examiner

Christopher R Nalevanko

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, the limitations of “controlling the conversion of data contents” and “when the data contents is converted to thus select a user-desired data content” are unclear and difficult to understand. It is unclear if the data is being converted to a different form, if the channel or interactive data is merely being changed to a different channel, or if a more complicated conversion is taking place. Further clarification is needed.

Regarding Claims 2-6, the claims are dependent upon Claim 1.

2. Claims 14 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 14 and 18 recite the limitation "the inverse multiplexing unit" in Claim 12. There is insufficient antecedent basis for this limitation in the claim. There is no “inverse multiplexing unit” presented in Claim 12.

The following art rejections are made with the Examiner’s best understanding of the claimed limitations in light of the 35 USC 112 2nd paragraph rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6-8, 12 and 14-17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mao et al.

Regarding Claim 1, Mao shows a data contents processing method, comprising steps for separating audio/video signals and data contents upon receipt of a broadcast signal and extracting information on the currently received channel and a program identifier (page 2 sections 0019-0022), constructing a database by forming an integrated information of the channel/program identifier information and data contents in connection with each other (page 2 sections 0019-0026), controlling the conversion of data contents by checking whether or not the data contents to be displayed are consistent with the current A/V material (page 2 sections 0026-0029, page 3 sections 0030-0033), and displaying the changed data contents with the A/V signal (page 4 sections 0059, page 5 section 0063). Mao shows a system the downloaded and extracts Internet information associated with a television signal. This information is stored and used to associate additional information with programming data. When a user changes a channel, the system checks to see if the additional data corresponds to the A/V signal. If there is

different Internet data to be displayed, the system displays the new additional data on screen.

Regarding Claim 2, Mao shows that if a channel is changed, the additional data is changed as well (page 4 section 0059).

Regarding Claim 3, Mao shows that, no matter what channel is displayed, the additional data always corresponds to the A/V material being shown (page 2 0019-0028, page 3 sections 0030-0031, page 4 section 0059).

Regarding Claim 6, Mao shows adjusting a channel to show the A/V signals and data content (page 5 section 0070).

Regarding Claim 7, Mao shows a data contents processing method, comprising steps for separating audio/video signals and data contents upon receipt of a broadcast signal and extracting information on the currently received channel and a program identifier (page 2 sections 0019-0022), constructing a database by forming an integrated information of the channel/program identifier information and data contents in connection with each other (page 2 sections 0019-0026), if the data contents to be displayed are not consistent with the current A/V signal according to the integrated information, judging whether or not the data contents to be displayed and the current A/V signals are consistent with each other (page 2 sections 0026-0029, page 3 sections 0030-0033), and displaying the received data contents being consistent with each other upon receipt of the data contents (page 4 sections 0059, page 5 section 0063, 0070). Mao shows a system the downloaded and extracts Internet information associated with a television signal. This information is stored and used to associate additional information

with programming data. When a user changes a channel, the system checks to see if the additional data corresponds to the A/V signal. If there is different Internet data to be displayed, the system displays the new additional data on screen.

Regarding Claim 8, Mao shows displaying the A/V signal and corresponding data content if the data contents is consistent with the A/V signal (page 5 section 0063-0067, 0070).

Regarding Claim 12, the limitations of the Claim have been discussed with regards to Claim 7. Furthermore, Claim 12 seems to be an identical copy of Claim 7.

Regarding Claim 14, Mao shows the use of multiple multiplexing units and de-multiplexing units for displaying the A/V signals on a display unit (fig. 7 & 8).

Regarding Claim 15, Mao shows a database constructing unit with storage for storing the separated data (page 2 sections 0021-0022, page 5 sections 0065-0068).

Regarding Claim 16, Mao shows a plurality of programs corresponding to one channel, and a plurality of data contents corresponding to each program (fig. 4 and fig. 6).

Regarding Claim 17, Mao shows that when a user selects a new channel the system checks to see if there is corresponding data contents and controls the browser to display the corresponding data contents (page 2 sections 0026-0029, page 3 sections 0030-0033, page 4 sections 0059, page 5 section 0063, 0070).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al in further view of Kaplan.

Regarding Claim 4, Mao fails to show that if the current user desired data contents are selected, the current channel is tuned to the channel corresponding to the selected data. Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Neither Mao nor Kaplan shows using a forward or back button. Official Notice is given that it is well known and expected in the art to use a forward and a back button while using an Internet browser. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan to use a forward and back button on the browser so the user could access pages that he or she had recently viewed.

Regarding Claim 5, Mao fails to specifically state viewing only the broadcast channel. Kaplan shows viewing only the broadcast channel (col. 6 lines 17-21). It would

Art Unit: 2611

have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to only tune to the broadcast channel in case the user was not interested in additional content.

Regarding Claim 18, Mao shows using a demultiplexer, or inverse multiplexer, to tune the television signal (fig. 8). Mao fails to show that if the current user desired data contents are selected, the current channel is tuned to the channel corresponding to the selected data. Kaplan shows tuning to a channel based upon changing the data contents (col. 6 lines 22-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao with the ability to change the channel tuned by selecting different content data so that the user would be provided with the appropriate television signal while he or she was surfing the Internet. Furthermore, this would provide an added navigational means in which the user could search for desired material.

Neither Mao nor Kaplan shows using a forward or back button. Official Notice is given that it is well known and expected in the art to use a forward and a back button while using an Internet browser. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao and Kaplan to use a forward and back button on the browser so the user could access pages that he or she had recently viewed.

5. Claims 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al.

Regarding Claim 9, Mao fails to show displaying a message that the A/V signal cannot be displayed or the function of the browser is not operable. Official Notice is

Art Unit: 2611

given that it is well known and expected in the art to display information regarding a signal's inability to be processed and displayed. This communicates to the user that the required data is not available (for example a 'server not found error' during Internet use). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao with the ability to inform the user that the required data to display an A/V signal or browser signal could not be received so that the user was aware of the communications problem.

Regarding Claim 10, Mao shows controlling the channel and the browser according to a user's request and storing the data contents (page 4 sections 0057-0059, page 5 sections 0066-0067, page 6 sections 0081-0082). Mao fails to show storing the A/V signal. Official Notice is given that it is well known and expected in the art to store television programming A/V signals for later viewing and reproduction. This allows the user to view a program at his or her convenience. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify Mao with the ability to store the programming signals so that a user could reproduce the program at a later time.

Regarding Claim 13, Mao does not show a forward/backward button. Official Notice is given that it is well known and expected in the art to use a forward and a back button while using an Internet browser. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao to use a forward and back button on the browser so the user could access pages that he or she had recently viewed.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al in further view of Shoff.

Regarding Claim 11, Although the system of Mao seems completely capable of displaying only the A/V signals, this is not specifically stated. Shoff shows displaying only the A/V signals when there is no supplemental information (col. 9 lines 1-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mao with the ability to display only A/V signals so that, in the event that there is no supplemental information, the browser is not operated.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ullman et al U.S. Patent Application Publication No. 2002/0038344 discloses an enhanced video programming system and method for incorporating and displaying retrieved integrated Internet information segments.

Goldschmidt Iki et al U.S. Patent No. 6,601,103 discloses a method and apparatus for providing personalized supplemental programming.

Matsuura U.S. Patent No. 6,430,743 discloses an apparatus of storing URL transmitted via vertical blanking interval of a television signal.

Leak et al U.S. Patent Application Publication No. 2003/0126621 discloses an interactive television triggers having connected content/disconnected content attributes.

Park et al U.S. Patent No. 6,460,180 discloses enabling and/or disabling selected types of broadcast triggers.

Bendinelli et al U.S. Patent No. 6,061,719 discloses synchronized presentation of television programming and we content.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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